

YouTube in Airlines Marketing

Josef ZELENKA, Jan HRUŠKA

University of Hradec Králové, Hradec Králové, Czech Republic
{josef.zelenka,jan.hruska.3}@uhk.cz

Abstract. This research was motivated by growing significance of social media in the field of tourism marketing. Its aim was to find out and by using various metrics comparatively describe the way YouTube is used by airlines and compare YouTube channels of full service carriers (FSCs) and those of low-cost carriers (LCCs). Particular attention was paid to finding reasons why airlines YouTube channels are successful. It was decided to assess the top five FSCs and the top five LCCs according to the number of video views and the top eight airlines ranked by IATA based on the number of transported passengers. The comparison showed that FSCs build their YouTube channels more systematically, they offer a wider range of video topics and often sort out topics of their videos in a more detailed way. Significant metrics of YouTube channels show that FSCs surpass LCCs in many ways. With respect to the dominant position of YouTube regarding the number of visits to the site, it is possible to expect that airlines will further develop its usage, including investments into creating videos both emotionally motivating and featuring celebrities.

Keywords: Social Media, YouTube, Viral Marketing.

1 Introduction

Social media and potential ways of using them significantly change current marketing and bring about a lot of challenges for marketing managers [8]. According to [14, 16, 22, 23, 31, 33] among others, social media are widely used in tourism, particularly in order to share, search, compare and gather information, which links social media and marketing of tourism on many levels. Leung et al. [17] even label social media as a megatrend in tourism.

Social media in connection with other ICTs not only change the way journeys are experienced to being at home and at the same time on the way [29], but it also changes social relationships of tourism participants [28]. Social media also influence decision making of (potential) tourism participants. Typical examples are travel and tourism websites generated by users (e.g. TripAdvisor; destination marketing linked to it is described by [15] and review websites (the quality of TripAdvisor, Expedia, or Yelp websites was analysed by [30]. The eWOM (electronic word-of-mouth) makes social media significant particularly in tourism, where the customer cannot get to know the product beforehand [19]. Social media have thus become an important part of travel and tourism marketing for providers of tourism services and destination

management [7, 14]. There are several identified benefits of using social media for marketing, branding and awareness, such as acquiring new customers, gathering feedback from customers or community, raising awareness of community efforts and connections, building community networks, and fund raising [18]. Social media as a whole e.g. [14] as well as individual social media are viewed as a marketing tool (e.g. [20] for Facebook, and [6] for Twitter). Their efficient use improves competitiveness e.g. [14]. At the same time, tourism websites show a trend towards communication with users based on multimedia and more generally on graphics e.g. [32, 4], including a preference for sharing graphical content in social media [21]. Kim and Mattila [13] emphasized the significance of video sequences on hotel websites for potential customers who thus can learn beforehand about hotel services (airlines offer similarly complex services) and decrease the risk they run when buying services at a distance. Tussyadiah and Fesenmaier [27] documented that videos shared on social media often influence subconscious decisions of tourism participants about the choice of destination or tourism services – videos support fantasy and day-dreaming of tourism participants and evoke their memories.

For both full service carriers (FSCs) and low cost carriers (LCCs) quality marketing with a wide use of ICT, including social media, is typical. Due to the growing importance of social media and multimedia communication with potential clients, the presented research was aimed at the way YouTube is used by airlines. Particular attention was paid to the success rate of this communication and the reasons for that. A significant part of this work was pre-research that tested if the number of uploaded videos regardless of their content is one of the factors for YouTube channel success. This research shows that there is no statistically significant correlation between the number of daily uploaded videos and user interactions (likes, dislikes and comments). This paper will test several other variables and try to determine which of them are important in order to run a successful YouTube channel, specifically an airline one.

Research aimed at the way of presenting and typical features of airlines YouTube channel videos, the success rate of these videos measured by the number of views, factors causing this success rate, and finding out possible differences in both presenting and success rates between FSCs and LCCs. The following questions were asked:

- How important part of airline marketing does YouTube constitute?
- What is the typical content of airlines YouTube channel videos?
- Which airlines are the most successful in addressing YouTube users and why?
- What types of videos do airlines YouTube channel users prefer?
- What differences are there in using YouTube between FSCs and LCCs?

2 Methodology

In order to answer the research questions, following research method were employed: selection of a suitable referential research sample of FSC and LCC YouTube channels, the method for classification of types of airlines YouTube channel videos,

qualitative and quantitative research for assessing the portfolio of referential research sample of airline channels. As the referential research sample for the quantitative analysis there were selected:

- Five most frequently watched FSCs: KLM Royal Dutch Airlines, Turkish Airlines, Air France, Emirates and LATAM Airlines. The selection is based on the total number of views of all videos of the corresponding FSC.
- The same criterion was applied to determine five most frequently watched LCCs: WestJet, AirAsia, Pegasus Airlines, SpiceJet, JetBlue.

In order to classify types of used videos and for research of video portfolio (including the types of most frequently watched videos), the referential sample was supplemented with another six FSCs (American Airlines, Delta Air Lines, United Airlines, China Southern Airlines, Lufthansa, British Airways) and two LCCs (Southwest Airlines a Ryanair). The criterion of their selection was the number of transported passengers based on data by IATA ([9]).

In order to classify the types of videos presented by airlines, the main criterion was the content and the main feature that should attract the user's attention. Such an attribute was typically a celebrity featuring in an otherwise trivial plot of the video. The classification took into account the specifics of tourism participants' motivation in their selection of destination (strife for attractions, activities, experiences).

3 Theoretical basis

One of the most important ways how to make a firm or company grow nowadays is to influence social media in the right way and have a good relationship with customers and keep them in action. Khan and Vong [11] capture the role of social media in the current world precisely. In the contemporary society, social media are changing the way in which people create, share, and consume information.

Videos are a significant part of multimedia communication. Hautz et al. [5] came up with results that prove important for assessing the effectiveness of videos placed by tourism service providers and destination management on social media. They give evidence that social network users do not significantly prefer user-generated videos (UGVs) to agency-generated videos (AGVs). They also pointed out the quality of videos. In case of high-quality videos there is no significant difference in social network users' preferences. On the other hand, in case of low-quality videos users prefer UGVs. Therefore, videos posted on social media by service providers and destination management should be of high quality to be competitive with UGVs.

YouTube is the most widely used network for sharing and watching videos and according to Alexa [2], as of 1 May 2017, YouTube is the second most frequently used website only to Google.com. A statistical web Statista [25] states that since 2015, 400 hours of video content is loaded on YouTube every minute. These statistics show that the most watched type of video is music video, followed by beauty and fashion tips, personal video blogs and educational or instruction videos. In order to

utilize YouTube in targeted marketing, it is important to know the potential of viral sharing of various types of videos. Music videos, true story videos and celebrity videos have the highest potential for viral sharing [26]. Such videos may achieve 100 million views in less than ten days [26]. Camarero and José [3] concluded in their research of viral dynamics that the effectiveness of viral spreading is strongly influenced by the person's integration in the social network, their relationships inside it and their relation to the shared content. The ways how to make a YouTube video viral are to give them +/- assessments, add comments to the video and there is also the YouTube recommendation system, related to the user's former activities.

As Khan's [12] research shows, the most important motivations of passive YouTube users are relaxation, entertainment (in concord with [25] concerning music video preferences), and reading other user's comments. In order to assess YouTube users' activities in relation to marketing, it is necessary to consider various groups of users' motivation and activities. It is typical for a group of users looking for information that they enter their rating and comments but they neither share videos, nor upload their own ones [12].

4 Results

4.1 Classification of video types

There were determined 19 video types (in bold below) based on the content of airline company videos. One of the most significant topics approached in different ways is company introduction. This introduction may take the form of impression/relationship presentation of the company, or the history of the airline, or a summary of basic facts about the airline (company introduction). Regarding the destinations where the airline flies, there are presentations of destinations as groupings of attractions (destinations), activities in destinations, and the experiences of travellers in destinations. The way of providing services is linked to presenting often very creative safety videos (safety), presenting the quality of services, an offer of games and entertainment for passengers, explaining service technology, and experiences of airline passengers. Airline social responsibility, advertising campaigns targeted at the topical offer and presenting customer benefits are important for airline marketing, too. According to Statista [25], the audience rating of airlines YouTube channels is increased by celebrities, which also have, as Statista [26] maintains, high viral potential. High viral potential is also the basis for the utilization of music/music clips, and life stories on airlines YouTube channels. Travelling is also supported by travel tips. Another relatively frequent topic is employees and job offer (the topic of employees sometimes mingles with impression/relationship presentation of airline companies).

The overall frequency of individual video types is shown in Fig. 1, which compares FSCs with LCCs. The total average number of topics is in case of FSCs 11, whereas that for LCCs is 7.

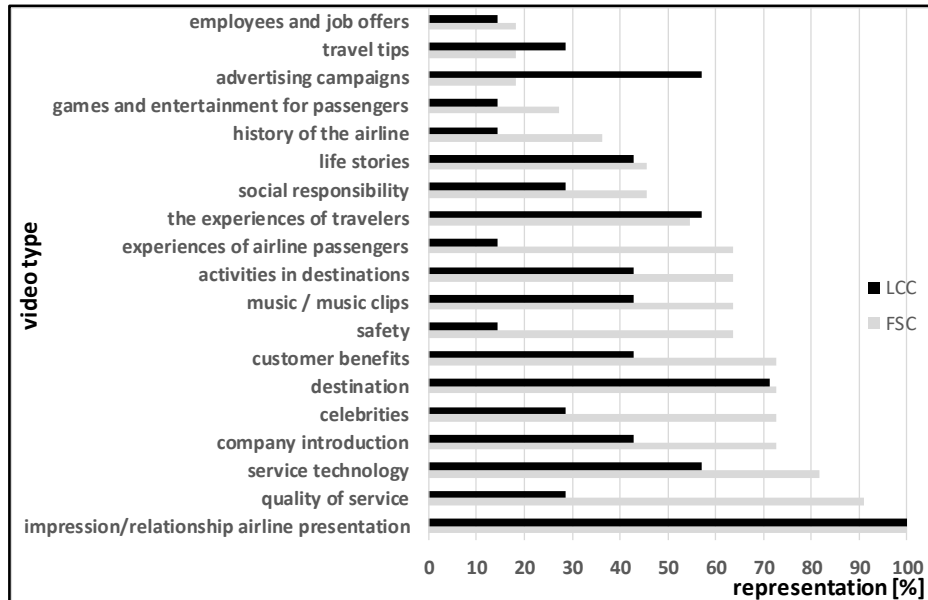


Fig. 1. Summary of various video types for FSCs and LCCs in percentages.

4.2 Research of airlines video portfolios on YouTube

The research of airlines video portfolios on YouTube, whose basic characteristics are shown in Table 1, was aimed at several topics:

- what types of videos are most popular with subscribers,
- what is distinctive about presented videos of individual airlines,
- whether there is any difference between FSCs and LCCs presentations,

The overview of the most popular types of airline videos on YouTube was based on the overall assessment of five most popular types of videos on YouTube of each carrier. The types of videos that are most popular with viewers are depicted in Fig. 2 (IRPC stands for impression/relationship presentation of the airline company), by their proportional representation among the five most popular videos. Impression/relationship presentation of the company is clearly dominant, as its share among the top five types of videos is 31% (all airlines present this topic).

Another interesting statistics shows the viewer ratings of the most frequently viewed video types in absolute numbers for all airline companies together (Fig. 3). This graph clearly shows the popularity of videos featuring celebrities as well as IRPC videos. These most frequently viewed video types may form a significant part of an airline company's total viewer ratings. For example, in case of Turkish Airlines the most popular videos make more than 50% of viewer ratings, and the most frequently viewed video of Air France comprises as many as 80% of the total viewer ratings.

Table 1. Basic characteristics of selected airlines video portfolios on YouTube as of 25th June 2017 (LCCs grey fields). Source: [24]

Airline	number of videos	video topics	view count [mil]	subscribers [th]	channel regist. from	oldest videos [year]	link to own website
KLM	549	17	113.4	108.6	2009	8	0
Turkish Airlines	318	11	512.3	163.7	2006	6	1
Air France	421	12	132.2	56.3	2011	5	1
Emirates	417	14	102.6	215.1	2006	5	1
LATAM Airlines	262	11	91.7	110.0	2005	3	2
American Airlines	395	10	13.6	44.7	2006	8	1
Delta Airlines	369	12	16.7	59.8	2006	1	0
China Southern Airlines	20	3	0.1	0.4	2014	2	0
United Airlines	164	10	10.0	26.0	2006	5	1
Lufthansa	321	11	26.7	36.8	2006	7	1
British Airways	381	12	45.5	91.0	2009	6	0
WestJet	381	9	92.4	62.0	2006	7	0
AirAsia	799	9	62.3	57.7	2006	6	1
Pegasus Airlines	184	5	34.8	12.8	2010	7	1
SpiceJet	81	4	32.2	7.0	2009	7	0
JetBlue	170	9	14.5	18.6	2006	6	1
Ryanair	306	7	10.6	17.6	2012	1	1
Southwest Airlines	566	8	7.8	23.8	2007	9	1

Comments: for “link to own website”: 0 Youtube not linked to the website of the airline, 1 linked to the website, 2 linked to only some regional website of the airline.

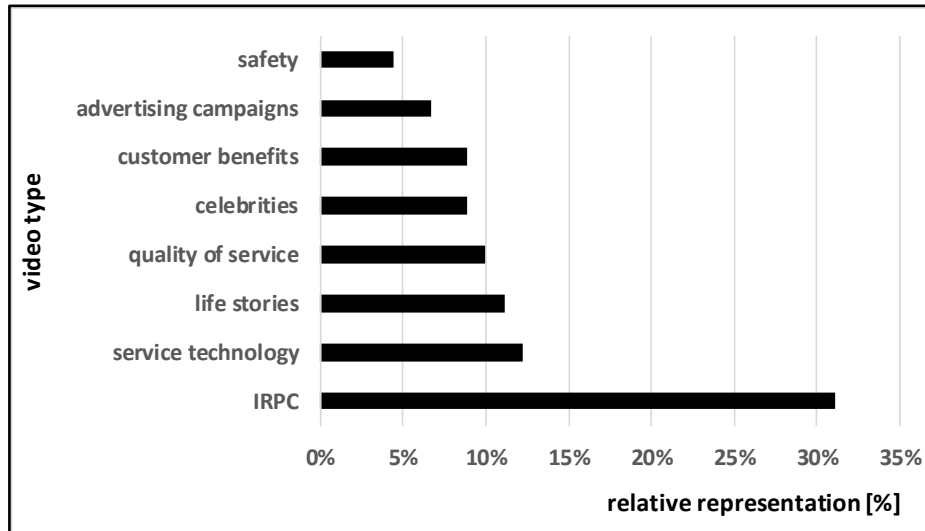


Fig. 2. The most popular types of airline videos on YouTube (as of 20th May 2017), according to their relative frequency of presence among the top five videos.

The concept, content, and emphasis on individual topics of videos on YouTube as well as the utilization of specific approaches differ among airline companies. There are several examples below (see also the discussion of YouTube channel success rate):

- KLM presentation on YouTube emphasizes the company services and its external relations. The public is included in YouTube channel creation by means of selfie videos, created as panoramic 360 degree views of visited destinations.
- Turkish Airlines emphasize the utilization of sport celebrities - football and basketball stars (Messi, Drogba, Kobe), life stories, and creating impression.
- Emirates offer (similarly to Southwest Airlines) 360 degree videos and panoramic views, emphasize the utilization of sport stars (football), and sport sponsoring. Safety videos, made in an interesting way, using teams of stylishly clad air hostesses on stadia, are popular, too.
- Air France typically focus on image and impression, offer a lot of animated cartoons aimed at children as well as adults, and provide explanations concerning their service technology.
- WestJet also use sport stars (baseball), and emphasize destinations in its presentation.

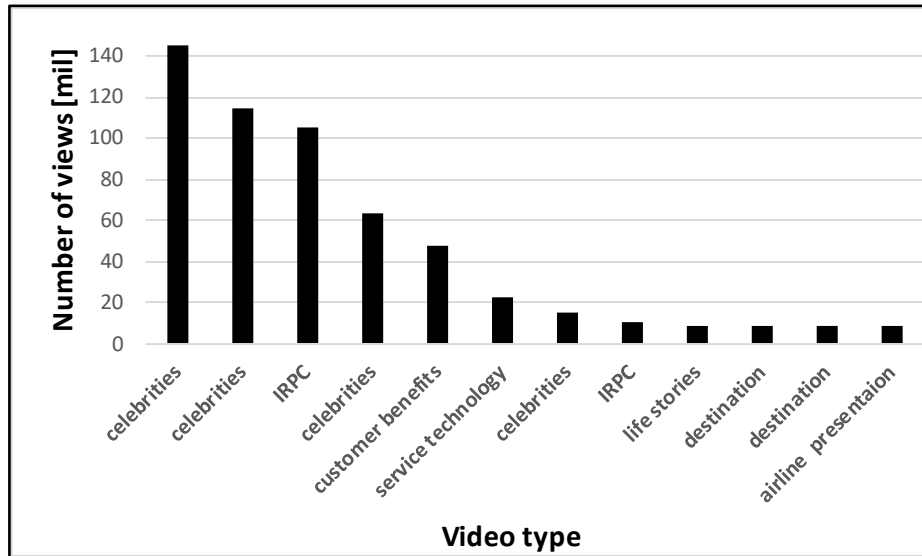


Fig. 3. Absolute viewer ratings of the most popular types of airline videos on YouTube as of 20th May 2017.

5 Discussion

Even though [2] states that as of 1st May 2017, YouTube was the second most used website, part of the eighteen analysed airlines see YouTube as a supplementary social medium for their marketing (one third of airline companies has no link between YouTube and their website). There are clear differences between the approaches of airline companies towards YouTube and their YouTube channels' success rates. Good correlation is between the number of video types (which is a significant trait of good care of YouTube channels, see the discussion below), the number of registered video subscribers and the total number of video views.

An analysis of eighteen airline companies' YouTube channels resulted in finding 19 distinct topics of videos. The topics are based on the following needs of airline companies (several topics meet more than one need), on the knowledge of quality marketing as well as potential customers' expectations concerning the contents of airlines YouTube channels:

- Sort of provided services (service technology, safety, quality of service, games and entertainment for passengers).
- Need to establish a relationships with the carrier's potential customers (company introduction, impression/relationship presentation of the company, customer benefits, airline social responsibility, history of the airline, experiences of airline passengers).

- Knowledge of event marketing effectiveness, as it is shown by Alagöz and Ekici ([1]), who analysed Turkish Airlines (experiences of airline passengers, activities in destinations, the experiences of travellers).
- Advice and support for travellers – emotional, factographic, relational (destination, activities in destinations, travel tips, the experiences of travellers).
- Knowledge of the potential of viral videos (as it was mentioned by [26], music videos, life stories and videos about celebrities) – airlines channel topics are therefore celebrities, life stories, music/music clips).
- Needs of airline company management (employees and job offers).
- Direct application of marketing communication (advertising campaigns).

In order to assess the success rate of airline companies in addressing YouTube users, the applied metrics was based on the total amount of video views on YouTube. This metrics was used as a basis for selecting the portfolio of airline company videos for further analyses. The most successful FSCs are Turkish Airlines, Air France, KLM, Emirates and LATAM Airlines, and their LCC counterparts are WestJet, AirAsia, Pegasus Airlines, SpiceJet, and JetBlue. At the same time, the biggest FSCs are not necessarily the most successful on YouTube. Among big airline companies, Emirates and Air France are successful, whereas other big airline companies like British Airways, Lufthansa, Delta Airlines, American Airlines, United Airlines, or China Southern Airlines are not successful on YouTube.

As total numbers of viewers of the most successful airline company YouTube videos depicted in Fig. 3 show, videos with sport celebrities (football, basketball, baseball) boast the top viewer ratings. Fig. 3 and particularly Fig. 2, showing the most frequently viewed video types on airlines YouTube channels, suggest that airlines can also easily achieve high viewer ratings with impression/relationship presentation of the airline company. High viewer ratings can also be achieved by quality and inventive videos about service technology and quality of service, about customer benefits, destinations and life stories. The claim by Statista [26] that videos about celebrities and life stories have huge viral potential was proved. On the other hand, another claim by Statista [26] that music videos also have huge viral potential was disproved, which may, according to the analysis, have to do with their low quality as well as with their different thematic focus in comparison with airlines YouTube channels.

The applied analysis assessed and compared the utilization of YouTube only for the most successful FSCs and LCCs and selected biggest FSCs and LCCs. The comparison had the following results:

- FSCs build their YouTube channels more systematically than LCCs, FSCs offer a wider range of video topics (Fig. 1) and they usually group their video topics more elaborately.
- FSC channels are better developed, and they have better results in all three significant YouTube channel metrics (range of topics, subscribers, total uploaded video views).
- The reason for higher viewer ratings of FSCs is the fact they use celebrities in their videos more frequently than LCCs (see Fig. 3).

- FSC videos have significantly more interactions per one thousand subscribers than LCC videos, FSC videos motivate their viewers to react by comments, likes or dislikes much more than LCC ones.

One of the bases of this study was to find suitable metrics for assessing the success rate of airlines YouTube channels. The total number of views on YouTube became a success criterion and at the same time one of two criteria for selecting airline companies whose YouTube channels were analysed (see discussion above). The other one was the total number of transported passengers as a metrics for determining the size of airline companies. The success rate of airlines YouTube channels is assessed by means of their current static characteristics (the number of subscribers), and the dynamics of their development (dynamics of their subscriber growth).

The pilot study assumption that the total number of videos on YouTube channel is not the decisive factor for the airlines YouTube channel success was confirmed. Prerequisites for the airlines YouTube channel success lie in selecting the most successful video topics (celebrities, impression/relationship presentation of the company), applying invention (interesting safety videos), and a suitable way of sorting the channel contents.

The study of success rate of airlines YouTube channels could have been more detailed if the authors had known the amount of money that the selected airline companies invested in marketing targeted on YouTube. Anyway, companies should primarily target on making successful video types, the amount of invested money may not be as significant as creating catchy contents, and the focus on stable growth with some irregularly viral videos.

6 Conclusion

This study shows that marketing and the use of social media in general is a very complex phenomenon, it needs practice and willingness to experiment. Social media marketing, in practice, is too complex to be managed and executed exclusively by a single individual or a department. This paper shows some connections and correlations of YouTube metrics for the selected top five FSC YouTube channels and their five LCC counterparts, based on the number of total channel views. It is important to create high quality contents capable of addressing the viewer's emotions. The study shows that all companies create short videos (under 5 minutes). The best company contributions on YouTube were never longer than five minutes but the majority of them had around one minute. A significant aspect is to address the viewer's emotions and motivate them to interact in the form of likes or comments. Another consequential fact is the utilization of sport celebrities in videos. Further research could aim at analysing how much airline companies invest in marketing and what number of subscribers is adequate. Another interesting and important area of interest could be to determine what videos of the selected airline companies went viral and why. Further research could also concentrate on typical strategies applied in creating airlines YouTube channels, on further elaboration of metrics for measuring

the success rate of airline YouTube channels, and on assessing the role of YouTube in airline company marketing strategies.

Acknowledgements. The financial support of the Specific Research Project “Information and knowledge management and cognitive science in tourism” of FIM UHK is gratefully acknowledged.

References

1. Alagöz, S. B., Ekici, N.: Experiential Marketing and Vacation Experience: The Sample of Turkish Airlines*. *Procedia - Social and Behavioral Sciences* 150(September 2014), 500–510 (2014), DOI: 10.1016/j.sbspro.2014.09.065.
2. Alexa: The top 500 sites on the web, <http://www.alexa.com/topsites>, last accessed 2017/06/25.
3. Camarero, C., José, R. S.: Social and attitudinal determinants of viral marketing dynamics. *Computers in Human Behavior* 27(6), 2292–2300 (2011), DOI: 10.1016/j.chb.2011.07.008.
4. Dionyssopoulou, P., Pridezi, A.-E., Mylonakis, J.: Visual Communication Management Technologies in Promoting Tourism Destinations. *International Journal of Management Technology* 2(1), 29–44 (2014).
5. Hautz, J. et al.: Let Users Generate Your Video Ads? The Impact of Video Source and Quality on Consumers' Perceptions and Intended Behaviors. *Journal of Interactive Marketing* 28(1), 1–15 (2014), DOI: 10.1016/j.intmar.2013.06.003.
6. Hay, B.: Twitter Twitter – But who is listening? A review of the current and potential use of Twittering as a tourism marketing tool. In: 20th International Research Conference: “Challenge the Limits”, vol. 20, pp. 561–575. University of Tasmania, Hobart (2010).
7. Hays, S., Page, S. J., Buhalis, D.: Social media as a destination marketing tool: its use by national tourism organisations. *Current Issues in Tourism* 16(3), 211–239 (2013), DOI: 10.1080/13683500.2012.662215.
8. Hofacker, C. F., Belanche, D.: Eight social media challenges for marketing managers. *Spanish Journal of Marketing - ESIC* 20(2), 73–80 (2016), DOI: 10.1016/j.sjme.2016.07.003.
9. IATA: WATS 2016, http://www.iata.org/docx/WATS_2016-infographic.pdf, last accessed 2017/06/25.
10. Kang, J., Lee, H.: Modeling user interest in social media using news media and Wikipedia. *Information Systems* 65, 52–64 (2017), DOI: 10.1016/j.is.2016.11.003.
11. Khan, G. F., Vong, S.: Virality over YouTube: an empirical analysis". *Internet Research* 24(5), 629–647 (2014), DOI: 10.1108/IntR-05-2013-0085.
12. Khan, M. L.: Social media engagement: What motivates user participation and consumption on YouTube? *Computers in Human Behavior* 66(January 2017), 236–247 (2017), DOI: 10.1016/j.chb.2016.09.024.
13. Kim, S., Mattila, A. S.: An examination of electronic video clips in the context of hotel Websites. *International Journal of Hospitality Management* 30(3), 612–618 (2011), DOI: 10.1016/j.ijhm.2010.11.005.
14. Kiráľová, A., Pavlíček, A.: Development of Social Media Strategies in Tourism Destination. *Procedia - Social and Behavioral Sciences* 175(February 2015), 358–366 (2015), DOI: 10.1016/j.sbspro.2015.01.1211.

15. Kladou, S., Mavragani, E.: Assessing destination image: An online marketing approach and the case of TripAdvisor. *Journal of Destination Marketing & Management* 4(3), 187–193 (2015), DOI: 10.1016/j.jdmm.2015.04.003.
16. Law, R., Buhalis, D., Cobanoglu, C.: Progress on information and communication technologies in hospitality and tourism". *International Journal of Contemporary Hospitality Management* 26(5), 727–750 (2014).
17. Leung, D. et al.: Social Media in Tourism and Hospitality: a Literature Review. *Journal of Travel & Tourism Marketing* 30 (March 2013), 3–22 (2013), DOI: 10.1080/10548408.2013.750919.
18. Lily, L., Yuan, W., Lifeng, H.: Marketing via social media: a case study. *Library Hi Tech* 31(3), 455–466 (2013), DOI: 10.1108/LHT-12-2012-0141.
19. Litvin, S. W., Goldsmith, R. E., Pan, B.: Electronic word-of-mouth in hospitality and tourism management. *Tourism Management* 29(3), 458–468 (2008), DOI: 10.1016/j.tourman.2007.05.011.
20. Mariani, M. M., Di Felice, Mura, M.: Facebook as a destination marketing tool: Evidence from Italian regional Destination Management Organizations. *Tourism Management* 54(June 2016), 321–343 (2016), DOI: 10.1016/j.tourman.2015.12.008.
21. Munar, A. M., Jacobsen, J. K. S.: Motivations for sharing tourism experiences through social media. *Tourism Management* 43(August 2014), 46–54 (2014), DOI: 10.1016/j.tourman.2014.01.012.
22. Nezakati, H. et al.: Review of Social Media Potential on Knowledge Sharing and Collaboration in Tourism Industry. *Procedia - Social and Behavioral Sciences* 172(January 2015), 120–125 (2015), DOI: 10.1016/j.sbspro.2015.01.344.
23. Pan, B., Crotts, J.: Theoretical models of social media, marketing implications, and future research directions. In: Sigala, M., Christou, E., Gretzel, U. (Eds.). *Social Media in Travel, Tourism and Hospitality: Theory, Practice and Cases*, January 2012, pp. 73–86. Ashgate, Surrey (2012).
24. Socialbakers (2017). Brands YouTube statistics - Airlines. <https://www.socialbakers.com/statistics/youtube/channels/brands/airlines/>, last accessed 2017/06/25.
25. Statista: Statistics and facts about YouTube, <https://www.statista.com/topics/2019/YouTube/>, last accessed 2017/06/24.
26. Statista: Fastest viral videos as of October 2015, <https://www.statista.com/statistics/220391/fastest-viral-videos-to-reach-100-million-hits/>, last accessed 2017/06/22.
27. Tussyadiah, I., P. Fesenmaier, D. R.: Mediating Tourist Experiences: Access to Places via Shared Videos. *Annals of Tourism Research* 36(1), 24–40 (2009), DOI: 10.1016/j.annals.2008.10.001.
28. Urry, J.: Social networks, mobile lives and social inequalities. *Journal of Transport Geography* 21(March 2012), 24–30 (2012), doi:dx.doi.org/10.1016/j.jtrangeo.2011.10.003.
29. White, N. R., White, P. B.: Home and away: Tourists in a Connected World. *Annals of Tourism Research* 34(1), 88–104 (2007), DOI: 10.1016/j.annals.2006.07.001.
30. Xiang, Z. et al.: A comparative analysis of major online review platforms: Implications for social media analytics in hospitality and tourism. *Tourism Management* 58(February 2017), 51–65 (2017), DOI: 10.1016/j.tourman.2016.10.001.
31. Xiang, Z., Gretzel, U.: Role of social media in online travel information search. *Tourism Management* 31(2), 179–188 (2010), DOI: 10.1016/j.tourman.2009.02.016.
32. Zelenka, J.: Informační a komunikační technologie - perpetuum mobile cestovního ruchu. *Czech Journal of Tourism* 1(1), 5–17 (2012).

33. Zeng, B., Gerritsen, R.: What do we know about social media in tourism? A review. *Tourism Management Perspectives* 10(April 2014), 27–36 (2014), DOI: 10.1016/j.tmp.2014.01.001.